

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I 5 POST OFFICE SQUARE, SUITE 100 BOSTON, MASSACHUSETTS 02109-3912

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Michael Lambert
Director of Design and Construction Services
Office of Planning, Design and Construction
Division of Capital Asset Management and Maintenance
One Ashburton Place, 15th Floor
Boston, Massachusetts 02108

Re:

PCB Cleanup and Disposal Approval under 40 CFR §§ 761.61(a) and (c)

Bowman Hall

Massachusetts College of Liberal Arts

North Adams, Massachusetts

Dear Mr. Lambert:

This is in response to the Commonwealth of Massachusetts Division of Capital Asset Management and Maintenance (DCAMM) Notification¹ for approval of a proposed plan to address PCB contamination at Bowman Hall (the Site), part of the Massachusetts College of Liberal Arts and located at 375 Church Street in North Adams, Massachusetts. The Site contains PCB-contaminated materials that exceed the allowable PCB levels under 40 CFR § 761.20(a), § 761.61, and § 761.62. Specifically, PCBs have been found in caulk and in the adjacent building substrate (e.g., concrete and drywall).

In its Notification DCAMM has proposed the following PCB cleanup and disposal plan:

○ Remove interior and exterior PCB caulk with greater than or equal to (≥) 50 parts per million (ppm), porous surfaces (i.e., drywall within the stairwells to a distance of 6 inches and concrete sidewalk pads to a minimum distance of 1 inch from the caulk joint) and non-porous surfaces (i.e., entire window unit) adjacent to PCB caulk and dispose as a PCB bulk product waste in a TSCA-approved disposal facility in accordance with 40 CFR § 761.62(a);

The Notification was prepared by Woodard & Curran on behalf of the Division of Capital Asset Management and Maintenance (DCAMM) to satisfy the requirements under 40 CFR §§ 761.61(a) and (c). Information was submitted dated November 8, 2013 (PCB Remediation Plan); January 22, 2014 (Response to EPA comments); and February 13, 2014 (email clarification on concrete confirmatory sampling). These submittals shall be referred to as the "Notification".

- Sample porous surfaces to be removed (i.e., concrete panels above east elevation main entrance and portion of concrete foundation wall on west elevation) to confirm less than (<) 50 ppm PCB concentrations for off-site disposal as a < 50 ppm PCB remediation waste in accordance with 40 CFR § 761.61(a)(5)(i)(B)(2)(ii);</p>
- Sample non-porous surfaces (i.e., ductwork in contact with the red PCB caulk) in accordance with 40 CFR 761 Subpart N to establish the ductwork cutline. Remove non-porous surfaces with > 10 μg/100 cm² PCBs (to a minimum 6- inch distance from the caulk) and dispose as a PCB bulk product waste in a TSCA-approved disposal facility in accordance with 40 CFR § 761.62(a);
- Encapsulate PCB-contaminated porous surfaces in direct contact with PCB caulk (i.e., joint returns) with two coats of a liquid epoxy;
- Encapsulate PCB-contaminated porous surfaces not in direct contact with PCB caulk (i.e., façade panels, spandrels, and columns) with two coats of a liquid epoxy if the PCB concentration is greater than (>) 1 ppm in high occupancy areas or > 25 ppm in low occupancy areas as defined in § 761.3; and,
- Prepare a long-term monitoring and maintenance implementation plan for encapsulated surfaces and record a deed notice to document Site conditions and any use restrictions.

DCAMM has determined that certain sealants associated with the renovation project (i.e., roof metal door frame sealant and gray ductwork sealants) which have PCB concentrations < 50 ppm, are *Excluded PCB Products*. Under the PCB regulations, *Excluded PCB Products* are authorized for use and thus there is no requirement to remove these building materials or to decontaminate surfaces that are in contact with these building materials. While these building materials are not addressed in the Approval, DCAMM is proposing to remove the building products containing PCBs with > 1 ppm but < 50 ppm and to dispose of them at a permitted disposal facility.

With the exception of the sampling requirements under 40 CFR § 761.61(a)(6) and the encapsulation of PCB-contaminated *porous surfaces*, the proposed plan is consistent with the requirements for removal/disposal of *PCB bulk product waste* under § 761.62 and for cleanup and disposal of PCB-contaminated *porous* and *non-porous surfaces* under § 761.61(a). Based on the data-to-date, and the proposed removal plan, the alternative sampling plan is reasonable for the purpose of determining if the PCB cleanup standards have been met and if encapsulation is necessary. EPA may approve the alternative verification sampling under § 761.61(c).

The proposed encapsulation of PCB-contaminated *porous surfaces* should effectively prevent direct exposure of these PCB-contaminated *porous surfaces* to building users provided the physical barriers are maintained. EPA finds that the encapsulation of PCB-contaminated *porous surfaces* under § 761.61(c) will not pose an unreasonable risk of injury to human health or the environment. As such, EPA may approve the encapsulation under § 761.61(c).

DCAMM may proceed with its project in accordance with 40 CFR §§ 761.61(a) and (c); § 761.62(a); its Notification; and, this Approval, subject to the conditions of Attachment 1. Under this Approval, EPA is reserving its rights to require additional investigation or mitigation measures should EPA determine that the encapsulation is not effective in eliminating exposure to PCBs.

Questions and correspondence regarding this Approval should be directed to:

Kimberly N. Tisa, PCB Coordinator (OSRR07-2) United States Environmental Protection Agency 5 Post Office Square, Suite 100 Boston, Massachusetts 02109-3912

Telephone: (617) 918-1527 Facsimile: (617) 918-0527

EPA shall not consider this project complete until it has received all submittals required under this Approval. Please be aware that upon EPA receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

James T. Owens, III

Director, Office of Site Remediation & Restoration

cc Jeff Hamel, Woodard & Curran MassDEP – Western Region

File

Attachment 1 – PCB Approval Conditions

ATTACHMENT 1:

PCB CLEANUP AND DISPOSAL APPROVAL CONDITIONS BOWMAN HALL (the Site) MASSACHUSETTS COLLEGE OF LIBERAL ARTS 375 CHURCH STREET NORTH ADAMS, MASSACHUSETTS

GENERAL CONDITIONS

- 1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the PCB bulk product waste and the PCB remediation waste located at the Site and identified in the Notification¹.
- The Commonwealth of Massachusetts Division of Capital Asset Management and Maintenance (DCAMM) shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
- In the event that the cleanup plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.
- The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.
- 5. DCAMM must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, DCAMM shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.
- 6. DCAMM is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time DCAMM has or receives information indicating that DCAMM or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.

The Notification was prepared by Woodard & Curran on behalf of the Division of Capital Asset Management and Maintenance (DCAMM) to satisfy the requirements under 40 CFR §§ 761.61 (a) and (c). Information was submitted dated November 8, 2013 (PCB Remediation Plan); January 22, 2014 (Response to EPA comments); and February 13, 2014 (email clarification on concrete confirmatory sampling). These submittals shall be referred to as the "Notification".

- 7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by DCAMM are authorized to conduct the activities set forth in the Notification. DCAMM is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.
- 8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release DCAMM from compliance with any applicable requirements of federal, state or local law; or 3) release DCAMM from liability for, or otherwise resolve, any violations of federal, state or local law.
- Failure to comply with the Approval conditions specified herein shall constitute a violation of the requirement in § 761.50(a) to store or dispose of PCB waste in accordance with 40 CFR Part 761 Subpart D.

NOTIFICATION AND CERTIFICATION CONDITIONS

- This Approval may be revoked if the EPA does not receive written notification from DCAMM of its acceptance of the conditions of this Approval within 10 business days of receipt.
- 11. DCAMM shall submit the following information for EPA review and/or approval:
 - a certification signed by its selected abatement/demolition contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval;
 - b. a contractor work plan, prepared and submitted by the selected demolition or abatement contractor(s) describing the containment and air monitoring that will be employed during abatement activities. This work plan should also include information on how and where wastes will be stored and disposed of, and on how field equipment will be decontaminated; and,
 - c. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the extraction and analytical method requirements and quality assurance requirements specified in the Notification and in this Approval.

PCB CLEANUP AND DISPOSAL CONDITIONS

12. To the maximum extent practical, engineering controls, such as barriers, and removal techniques, such as the use of HEPA ventilated tools, shall be utilized during removal processes. To the maximum extent possible, disposable equipment and materials, including PPE, shall be used to reduce the amount of decontamination necessary.

- 13. PCB-contaminated materials shall be decontaminated as described below:
 - a. All visible residues of PCB caulk (i.e., *PCB bulk product waste*) shall be removed as described in the Notification.
 - b. The PCB cleanup standards for *porous surfaces* (i.e., concrete and drywall) shall meet the requirements under 40 CFR § 761.61(a)(4) as follows:
 - i) High Occupancy Areas:
 - (1) Exterior concrete surfaces located within 9.5 feet of the ground surface: the PCB cleanup standard shall be less than or equal to (≤) 1 part per million (ppm) PCBs for exterior *porous surfaces* (i.e., concrete) for the entire first floor level on the east, west, north, and south elevations and portions of the second floor on the east elevation.
 - (2) Interior Surfaces: ≤ 1 ppm PCBs for interior *porous surfaces* (i.e., drywall located in north and south stairwells).
 - ii) Low Occupancy Areas (exterior concrete at greater than 9.5 feet above the ground surface): the PCB cleanup standard shall be ≤ 25 ppm PCBs for exterior porous surfaces on the entire second and third floors on the west, north, and south elevations, and to portions of the second floor and all of the third floor on the east elevation.
 - iii) In the event the PCB cleanup standards for exterior *porous surfaces* cannot be met, the PCB-contaminated exterior *porous surfaces* shall be encapsulated as described in the Notification.
 - iv) Verification sampling of *porous surfaces* shall be performed on a bulk basis (i.e., mg/Kg) and analytical results shall be reported on a dry weight basis. Samples shall be collected according to the EPA Region *1 Standard Operating Procedure For Sampling Porous Surfaces* dated May 11, 2011 to a maximum depth of 0.5 inches. Samples shall be collected as described in the Notification.
 - v) Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846 and chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction and/or analytical method(s) is validated according to Subpart Q.

- c. The decontamination requirements for building non-porous surfaces (i.e., ductwork) shall be as follows:
 - i) The PCB decontamination standard for *non-porous surfaces* shall be $\leq 10 \, \mu g/100 \, \text{cm}^2$.
 - ii) Sampling of *non-porous surfaces* shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e. μg/100 cm²) and at the frequency specified in 40 CFR 761 Subpart N.
 - iii) Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction and/or analytical method(s) is validated according to Subpart Q.
 - iv) For decontaminated non-porous surfaces that have PCB concentrations at greater than (>) 10 μg/100 cm², DCAMM may conduct additional decontamination to achieve the required decontamination standard or must store and dispose of these materials as TSCA-regulated waste in accordance with 40 CFR Part 761.
- d. The PCB cleanup standard for bulk *PCB remediation waste* (i.e., soil located beneath concrete pads) shall be ≤ 1 ppm.
 - Following removal of the concrete pads, sampling shall be conducted as described in the Notification. Samples shall be collected on a bulk basis (i.e., mg/Kg) and reported on a dry-weight basis.
 - ii) Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.
 - iii) In the event that PCB concentrations in the soil samples are > 1 ppm, DCAMM shall submit to EPA its plan for cleanup of these soils in accordance with Condition 20.
- e. In the event that the PCB cleanup standard(s) for exterior *porous surfaces* cannot be achieved and encapsulation is implemented, post-encapsulation sampling shall be conducted to determine the effectiveness of the encapsulation.\
 - i) Surface wipe samples shall be collected from encapsulated *porous* surfaces at a minimum frequency of one sample per façade per joint type for a total of 14 samples. Wipe sampling of encapsulated surfaces shall be performed on a surface area basis by the standard wipe test as specified in 40 CFR § 761.123 (i.e., μg/100 cm²).

- ii) Chemical extraction for PCBs shall be conducted using Method 3500B/3540C of SW-846; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.
- iii) In the event that PCB concentrations in the wipe samples are
 > 1 μg/100 cm², DCAMM shall contact EPA for further discussion and direction on alternatives.
- DCAMM shall submit a monitoring and maintenance implementation plan (MMIP) to monitor the long-term effectiveness of the encapsulants. (See Condition 24).
- 14. PCB waste (at any concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with CFR 40 CFR § 761.40; stored in a manner consistent with 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61 or § 761.62, unless otherwise specified below.
 - Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g)(6).
 - Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).
 - c. PCB-contaminated water generated during decontamination shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

DEED RESTRICTION AND USE CONDITIONS

15. Within thirty (30) days of completing the activities described in the Notification and in the Approval, DCAMM shall submit for EPA review and approval, a draft deed restriction for the Site. The deed restriction shall include: a description of the PCB remedial actions taken at the Site; a description of the nature and extent of PCB contamination remaining at the Site following abatement; a description of the use restrictions for the Site; and the long-term monitoring and maintenance requirements on the Site. Within seven (7) days of receipt of EPA's approval of the draft deed restriction, DCAMM shall record the deed restriction. A copy of this Approval shall be attached to the deed restriction.

SALE, LEASE, OR TRANSFER CONDITIONS

- 16. The Site owner shall notify the EPA of the sale, lease or grant of any real estate interest in the Site, in writing, no later than sixty (60) days prior to such action. This notification shall include the name, address, and telephone number of the new owner(s). In the event that the Site owner sells, leases, or grants any real estate interest affecting a portion of the Site, the Site Owner shall continue to be bound by all the terms and conditions of this Approval, unless EPA allocates some or all of this Approval's responsibilities to the new owner(s), lessee or grantee. The notification procedures are as follows:
 - a. The new owner(s), lessee or grantee must request, in writing, that the EPA transfer some or all obligations and responsibilities under the Approval to the new owner(s), lessee or grantee;
 - The EPA reviews the request, and determines whether to allocate some or all of the obligations and responsibilities under the Approval to the new owner(s), lessee, or grantee; and,
 - c. The new owner(s), lessee or grantee provides written notification to the EPA of its acceptance of and intention to comply with the terms and conditions of the Approval or new approval, should EPA deem a new approval is necessary. The Approval or new approval may be withdrawn if the EPA does not receive written notification from the new owner(s), lessee or grantee of its acceptance of, and intention to comply with, the terms and conditions of the Approval or new approval within thirty (30) days of its receipt of the Approval or the new approval. Under such circumstances, all terms and conditions of this Approval will continue to be binding on the Site owner.
- 17. In the event that the sale, lease or grant of a real estate interest in the Site will involve or result in a change in the use of the Site, EPA may revoke, suspend, and/or modify this Approval or the new approval if it finds, due to the change in use, that this cleanup and disposal action will not be protective of health or the environment. The new owner or grantee shall record any amendment to the deed restriction, resulting from any approved modification(s), within sixty (60) days of such change(s).
- 18. In any sale, lease or grant of a real estate interest in the Site, the Site owner shall retain sufficient access rights to enable it to continue to meet its obligations under this Approval, except as provided above.

INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

- 19. DCAMM shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by DCAMM to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.
- 20. Any proposed modification(s) in the plan, specifications, or information in the Notification must be submitted to EPA no less than 14 calendar days prior to the proposed implementation of the change. Such proposed modifications will be subject to the procedures of 40 CFR § 761.61(a)(3)(ii).
- 21. If such modification involves a change in the use of the Site which results in exposures not considered in the Notification, the EPA may revoke, suspend, and/or modify this Approval upon finding that this cleanup and disposal action may pose an unreasonable risk of injury to health or the environment due to the change in use. EPA may take similar action if the EPA does not receive requested information needed from DCAMM to make a determination regarding potential risk.
- 22. DCAMM shall record any amendment to the deed restriction, resulting from any approved change or modification(s), within sixty (60) days of such change(s). (See Condition 15).
- 23. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
- 24. Within 60 days of completion of the work authorized under this Approval, DCAMM shall submit for EPA's review and approval, a detailed monitoring and maintenance implementation plan (MMIP) for the surface encapsulants, as applicable. DCAMM shall incorporate any changes to the MMIP required by EPA.
 - a. The MMIP shall include: a description of the activities that will be conducted, including inspection criteria, frequency, and routine maintenance activities; sampling protocols and frequency, and analytical criteria; and reporting requirements.
 - b. The MMIP shall include a communications component which details how the maintenance and monitoring results will be communicated to the Site users, including building users, other on-site workers, and interested stakeholders.

- c. The MMIP shall include a worker training component for maintenance workers or for any person that will be conducting work that could impact the building coatings/barriers.
- d. DCAMM shall submit the results of these long-term monitoring and maintenance activities to EPA. Based on its review of the results, EPA may determine that modification to the MMIP is necessary in order to monitor and/or evaluate the long-term effectiveness of the coatings and/or barriers.
- Activities required under the MMIP shall be conducted until such time that EPA determines, in writing, that such activities are no longer necessary.

RECORDKEEPING AND REPORTING CONDITIONS

- 25. DCAMM shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the cleanup and disposal and the analytical sampling shall be established and maintained by DCAMM in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of EPA.
- 26. DCAMM shall submit a final report as both a hard copy and electronic format (CD-ROM), to the EPA within 90 days of completion of the activities authorized under this Approval. At a minimum, this final report shall include: a short narrative of the project activities with photo-documentation; characterization and confirmation sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCB waste disposed of; copies of manifests and bills of lading; and copies of certificates of disposal or similar certifications issued by the disposer. The report shall also include a copy of the recorded deed restriction and a certification signed by a DCAMM official verifying that the authorized activities have been implemented in accordance with this Approval and the Notification.
- 27. As required under Condition 24 of this Approval, DCAMM shall submit the results of the long-term monitoring and maintenance activities to EPA as specified in the final MMIP to be approved by EPA.

28. Required submittals shall be mailed to:

Kimberly N. Tisa, PCB Coordinator United States Environmental Protection Agency 5 Post Office Square, Suite 100 – (OSRR07-2) Boston, Massachusetts 02109-3912

Telephone: (617) 918-1527 Facsimile: (617) 918-0527

 No record, report or communication required under this Approval shall qualify as a selfaudit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.

END OF ATTACHMENT 1